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ealth—the poor man's riches, the rich man's bliss.

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The subject of spectral illusions is more intimately connected with that of health than many persons imagine. To ignorance, and to superstition, its constant attendant, many of the stories extant of spectres and supernatural visitations, are doubtless to be referred; but a large class of these illusions of the mind owe their origin to a disordered state of one or other of the organs of the body, and the morbid impression upon the brain this state produces. While, in the first case, it is by the spread of knowledge, and the more general diffusion of the benefits of education, that the deception is to be removed; in the latter, this can be effected only by appropriate remedies, and a course of life adapted to preserve the body in the healthy enjoyment of all its functions.

No person, well acquainted with the physiology of the human mind, will, for a moment, suppose that the apparition which appeared to Brutus, or the well-known fearful spectre which is said to have warned Lord Lyttleton of his approaching death, nor the many inspiring visions of angels and saints, and the appalling forms of demons, which divers persons have seen, had any real existence. Physiology naturally induces us to refer them to the class of ocular spectres, and other hallucinations of the organs of the senses, and their corresponding organs in the brain. This explanation is rendered more certain, in proportion as we are enabled from facts to determine their correct history, and the state of health of the persons who have been the subjects of such deceptions.

Nevertheless, to the imaginations of the individuals themselves, all these supernatural appearances were, there can be little doubt, as distinctly formed as though they were real tangible objects, or corporeal beings "instinct with life." Though nothing more than illusions of the senses, yet, they were actually seen; and we need not, therefore, be surprised at the testimony which has been adduced in favour of their actual existence. The case of Nicolai, of Berlin, who was haunted by various fantasms, for a considerable length of time, while he was perfectly aware of their real character and origin, shows how readily a weak, ignorant, or superstitious mind, might be deceived in relation to them.

Persons labouring under delirium, are, it is well known, very liable to be disturbed by imaginary objects, the appearance of which ceases the moment the undue excitement of the brain is removed. In no case are these imaginary objects more conspicuous than in that of the drunkard, labouring under an attack of *delirium tremens*—a thousand demons and horrid shapes surround constantly his pillow—disgusting reptiles crawl upon his bed and person, or defile the food and drink of which he is about to partake; and, so strong is the deception—so well convinced is he of the reality of the objects which his disordered senses conjure up to torment him, that he is incessantly putting forth his hands to remove them, or making vain attempts to escape their disgusting or dreaded presence. But it is not necessary that the brain should be disordered to so great a degree as in the above cases, in order for it to produce similar appearances. A very slight irritation or disturbance of certain portions of that organ, either from prolonged wakefulness—the indulgence of the depressing passions, excessive study, or even an overloaded stomach, or the presence, in the latter, of indigestible food, will often be sufficient to create the illusion, either when the person is in a state of imperfect sleep, or in broad day light, and even when surrounded by company.

They who are much endowed with a poetic, fervid and mystical disposition of mind, are those most subject to such illusions. It has been observed by phrenologists, that the parts of the brain which are considered to be the organs of ideality, and of the sentiment of the marvellous, especially the last, exercise, under certain circumstances, an influence over the intellectual organs, or those by which the objects of the external world are perceived, of such a nature as to induce these organs to act irregularly, and thus to call up ideas of recollection, with a force and vividness seldom surpassed by real impressions. By these means, a spectrum is produced, which, unless carefully compared with the real objects by which the individual is surrounded, is capable of deceiving him into a belief of its absolute existence. Novel com-

binations of form are sometimes produced in this manner, by the morbid activity of certain organs of the brain; and thus persons seem, occasionally, to behold figures "of headless and misshapen monsters, of Gorgons, and of hydras dread," which have no prototypes in the material world. It must be recollected, that external objects are never seen in themselves, but merely the configurations on our organs, which the impressions such objects are adapted to create—this it is essential to keep constantly in recollection, when we endeavour to explain the phantasms of the mind.

Numerous were the omens attached by the credulous, in former days, to the manner, among other things, in which candles burnt, and particularly to the colour of their flames. When they burned blue, it was accounted ill luck, or else that some ghostly apparition was about to appear. Now, when the brain and nervous system are in the state favourable to the production of spectral illusions, the imagination will easily colour objects, without their really changing their tints, just as in the delirium of fevers, patients see spots of different colours on the walls, or imagine insects and motes upon the bed clothes. For the same morbid condition of the body, which may cause persons to see the spectral prognostic, would, in this case, cause them to behold the subsequent phantom, and thus the omen and its awful fulfilment would be viewed together in the support of superstition. The occular spectra seen by children, who go to bed with too full stomachs, or with irritable nervous systems, by whatever cause produced, such as the passage of uncouth faces, or of fantastic pageants by the bed at night, are to be referred to the renewal, and owing to the disturbed state of the brain, modification of the real impressions of objects seen in the day time, or vividly presented to their minds by written or oral description.

Persons, whose brains are disturbed by fever, or by disorders of the digestive organs, have seen spectral fantasms in their chambers at night, and have been enabled to compare them with surrounding objects, which have appeared more vivid, and, also, with the common ideas of imagination which have seemed less vivid—and by this comparison they have been enabled to describe them as holding a kind of intermediate rank between real objects and the ordinary pictures of the imagination. Sometimes the other organs of sense, as those of hearing and of touch, are subject to similar delusions: and, in a few instances, where the contemporaneous hallucinations of several of the senses have occurred, the spectre produced, has appeared, accompanied with the highest proofs, apparently, of its reality. Dr. Ferriar has collected some interesting illustrations of the nature and cause of these spirits, and justly observes, that the mythology of the ancients was highly calculated to favour the indulgence in such

illusive phantoms. Many of the superstitions which were engrafted during the middle ages upon the doctrines of Christianity, performed, for various parts of Europe, what the fables of the heathen deities did in ancient Greece and Rome, and what the fairy mythology of the northern nations had effected for them.

But when we have developed the physical causes of what are termed supernatural apparitions, we have not done all that seems requisite to complete their history. Many remarkable coincidences between these phantoms of the brain, and certain real events, to which they are supposed to have related, have occurred from time to time, and are recorded with such seeming accuracy, that they form a curious and interesting subject of inquiry to the philosopher. As far as their physical history goes, dreams, night mares, visions, apparitions, and the like phenomena, are referrible to a common origin, and perfectly explicable upon the established laws of the animal economy; nor are the striking coincidences connected with them more difficult of being explained, upon natural principles, in any of the instances in which we are in possession of all the facts of the case. In many, the impression produced upon an enfeebled system, by the apparent warning or prediction, has, of itself, produced its accomplishment; whilst in others, the apparition and the subsequent event, to which its appearance is supposed to refer, depend upon the same cause—a disordered state of body in the individuals concerned. If correct and minute accounts of the various superstitions extant, in different ages, and among different people, were compiled and published, together with all the collateral facts connected with them, they would clear up many idle tales and prejudicial notions, and show the natural origin of

> "————— a thousand fantasies,
> Of calling shapes and beckoning shadows dire,
> And air tongues which syllable men's names
> On shores and sands, and desert wildernesses."

DRINKS ALLOWED IN TRAINING.

To individuals who are undergoing a regular course of training, a very moderate quantity of drink is allowed. It is an established rule, that the less fluid there is taken into the stomach the better; too large a quantity being found to impede digestion, and to render the flesh soft and flabby. On no account is the quantity of drink taken permitted to exceed three English pints during the whole day. In many instances, the individual is restricted to even a less quantity. For breakfast and supper, the liquids made use of are either tea or milk, the latter being in most cases preferred. For dinner, home-brewed malt liquor, or

wine, is generally allowed. Upon the propriety of taking either of these drinks, there appears, however, to be not a little difference of opinion among those engaged in superintending the process of training; by a few, pure, soft water, or toast and water, being the only drink allowed; others recommend the use of malt liquors, but denounce wine; whilst others, again, direct the latter, but forbid ale, porter, or beer; but all appear agreed, that the less that is taken of either, the better. Malt liquors are not allowed until after a months' training; and then only to the extent of a pint at dinner, and one-third of a pint at supper. If the person in training insist upon wine, he is permitted to make use of two or three glasses after dinner, but at no other time: the use of red wines is in general disapproved of. When a course of training is adopted for the improvement of the health solely, neither wine nor malt liquors are admissible. The use of spirituous liquors is never permitted in training, on any consideration whatever, not even when diluted. The greatest care is taken to procure the purest and softest water, even though it be necessary to bring it from a considerable distance. Drink is never given immediately before a meal, unless in particular cases, when the thirst is excessive. The water is very properly directed to be taken by mouthfuls, and not in large draughts; in this manner it quenches thirst better, a too large quantity is prevented from being taken, and the stomach does not suffer from being suddenly distended. When the body is in a state of perspiration or suffering from fatigue, the individual is allowed only a very small portion of toast and water; cool, but never decidedly cold.

Exercises employed in Training.—Exercise, properly regulated, constitutes one of the most important branches of training. The great object of exercise is to increase and regulate all the secretions and excretions, more especially those of the stomach, intestines, and liver, and of the skin and kidneys; to equalize the circulation, so that a due amount of healthy blood is distributed to every portion of the body; to augment the power and bulk of the muscles; to impart tone to all the internal organs; where the habit is corpulent or too full of blood, to diminish the amount of fat, and of the fluids which overload the vessels, and to render the blood thinner and lighter. By these means, the individual acquires a more keen and regular appetite, a quick and perfect digestion, serenity of mind, and surprising increase of strength and wind, and the enjoyment of sound refreshing repose. The union, however, of vigorous exercise with pure, free air, is essential to the success of training. Diet, itself, seems to be but of secondary consideration to these, provided the food eaten be plain and in moderate quantity.

The exercises generally recommended are walking, riding on horseback, friction with the flesh-brush, fencing, quoits, tennis, playing at shuttle-cock, and the use of the dumb-bells. These are used alternately, as convenience serves; but no day is suffered to pass without the first or second being used as an out-door exercise, and likewise one or other of the remainder as an exercise at home. Persons under training always commence their exercises early in the morning; in summer, before six, and in winter as soon as it is light. The period for exercise abroad is never less than four hours, and generally from five to six, taken at two or three intervals. The period for in-door exercise, is usually not less than two hours. If a muscular man during his training, loses considerable flesh, his amount of exercise must be reduced. If his limbs, on the contrary, increase in bulk, it is an evidence that his exercise agrees with him. Exercise is never taken immediately before or after eating, due attention to proper periods of rest being equally important with regular exercise itself.

Pure Air.—The necessity of pure air in the process of training has already been adverted to. It is a point much, and very properly insisted upon, by every writer on the subject. The more an individual exercises in the open air, the firmer his flesh becomes. Care, however, is taken, that persons in training, while they enjoy a pure free air for several hours a day, be not exposed to cold and wet. Hence, their clothing is always adapted to the state of the weather, and changed the moment it becomes wet or damp. Rising early in the morning is considered indispensible; in summer, at five or six, and in winter at seven, or even earlier.

Among the ancients, exercise in a pure, salubrious air, was deemed essential to increase the vigour, strength, and activity of the frame. The principal schools of the Roman athletæ were accordingly established at Capua and Ravenna, places, the air of which was reckoned the purest and most healthy of any in Italy. They carried on their exercises in the open air, during every kind of weather, the changes of which soon ceased to affect them.

UNFERMENTED WINES OF THE ANCIENTS.

Mention is made in the most ancient writings now extant, of the use of wines as a very common drink; but whether in all cases we are to understand by the term wine, the fermented juice of the grape, will admit of considerable dispute. It is more than probable, that at first the juice of the grape, and perhaps

of other fruits, was simply expressed, and drank without further preparation. At what period the use of fermented liquors became general, it is impossible to determine. We admit it to be improbable, that the use of an exhilirating beverage prepared by fermentation, could have continued very long unknown in those regions of the earth, where the vine grows freely. The first portion of its fruit, remarks Henderson,* which had been pressed by accident or design, and allowed to remain for a short time undisturbed, would be found to have acquired new and surprising properties; and repeated trials would soon prove the value of the discovery. By degrees, the method would be learned of preserving, for constant use, the beverage so obtained; and various processes would be resorted to for enhancing its grateful qualities. The knowledge of the art would rapidly spread, and its simplicity would recommend it to universal adoption. All this is perfectly true, but, at the same time it is nevertheless certain that the simple unfermented juice of the grape was a very common drink among the ancients, even after fermented liquors were extensively manufactured; and it is to this beverage, destitute of inebriating properties, that the term 'wine' appears first to have been applied: its daily use among the ancient Greeks and Romans is noticed by writers of both nations of unquestionable authority, who have transmitted to us also minute accounts of the various plans adopted to preserve it unchanged from year to year.

It is highly probable, also, that the wines in common use among the Egyptians, as well as among the Hebrews, were unfermented. This will explain the frequent allusion which is made in the Old Testament to "the juice of the grape," or to the drinking of the "pure blood of the grape." That the juice of the grape, simply expressed, was drunk, anciently, even by the kings of Egypt, would appear, from the passage in Genesis, where the butler, relating his dream to Joseph, says, "and I took the grapes, and pressed them into Pharoah's cup, and I gave the cup into Pharoah's hand." And a friend has ingeniously suggested, whether the terms wine and strong drink of the scriptures may not have designated generally, the one the simple, and the other the fermented juice of the grape.

For the following account of the unfermented wines of the Greeks and Romans, we are indebted chiefly to the splendid quarto of Henderson.

The juice that flowed from the gentle pressure of the grapes upon one another, as they were heaped in the baskets or troughs, previously to their being trodden, was in the first

* History of Wines, p. 2.

place carefully collected in the vessels in which it was intended to be preserved, and set aside till the following summer, when it was exposed, during forty days, to the strongest heat of the sun. As it was procured from the most luscious grapes, and kept from the contact of the external air, the fermentation which it underwent would be very slight, and it would retain in perfection the full flavour of the fruit. This liquor appears to have been first made at Mitylene, in the island of Lesbos, and was held in high estimation.

Sometimes, however, when the quantity of the juice thus obtained was either too small, or not sufficiently saccharine, to enable it to keep without further preparation, that collected in the vat, before the grapes were subjected to the press, was put into a vessel of a particular shape, which was properly coated, and secured by a well pitched cork, and then sunk in a pond, where it was allowed to remain about a month, or until after the winter solstice. When taken up, it was commonly found to have lost all tendency to ferment, and might be preserved, unchanged, during a whole year or more. In this state it was considered as something between a syrup and a wine. When, instead of being placed in a fresh-water pond, the vessel was plunged in the sea, the liquor was thought to acquire very speedily the flavour of age. To this practice the oracle given to the fishermen, requiring them to dip Bacchus in the sea, may be supposed to allude.

On other occasions, when the juice of the grapes was deemed too thin and watery for the production of a good wine, as was almost always the case in rainy seasons, it was boiled down to a greater consistence, and a small portion of gypsum was added to it. The Lacedemonians, we are told, were in the practice of reducing it one-fifth part, and keeping it four years before it was drunk; others were satisfied with the evaporation of a twentieth part of the bulk. Sometimes, however, the inspissation was carried much further, and the boiling prolonged till one-third, one-half, or even two-thirds of the liquor were evaporated.

The liquor obtained from the juice of rich grapes, and reduced by evaporation to one-third, appears to have been drunk as a wine, and may be regarded as corresponding to the boiled wines of the moderns; but the other degrees of inspissation were chiefly employed for the purpose of correcting weak must, and for preparing the various condiments, which were resorted to for the purpose of heightening the flavours of the ancient wines. They were, in fact, identical with the *saba* or *raisine* of the French, and the *sapa* of the Italian, which are still used for culinary purposes, and which are made according to the same rules.

THE ART OF SWIMMING.

On a former occasion* we recommended swimming, at proper seasons, to the young and robust, as a recreation, combining the advantages of muscular exercise with those of bathing. As a means of preserving our own life, or that of our fellow-creatures, in cases of accidental submersion, we again call attention to it. Of the art of swimming no one should, indeed, be ignorant. To be able to preserve life, is surely a matter of exquisite delight, remarks Saltzman; but of what effect are all injunctions, excitements, or public rewards, for rescuing an individual from a watery grave; or what the strong impulse of our own humanity, when we are obliged to run about in quest of that assistance which we cannot afford ourselves? Nay, if it were possible that we could regard only our own safety, the utility of the art of swimming is too obvious to need further recommendation.

The ancient Greeks and Romans, when they would express the idea of a man's knowing nothing, or being fit for nothing, used to say, that he could neither read nor swim. All beasts can swim: therefore swimming is not strictly an art, but rather a natural faculty of the animal body, which was bestowed on it by the Creator; because he knew it would be perpetually exposed to the danger of falling into an element, so abundantly spread over the surface of the globe as water. Man only, or rather the polished European, cannot—partly because it never enters into his mind to attempt it as an object of education, and partly because the natural faculty is more or less destroyed by the physical treatment of our youth. This is a serious charge, because it includes with the impairing of this faculty, a number of diseases of the chest, by which multitudes are consigned to an early grave. Scarcely is the infant come into the world, when his chest is subjected to compression. This vile fashion does not cease here; our usual dress worn over the breast, is, in too many cases, a continuation of the compression throughout life. The breast bone and ribs are at first mere cartilages, and should extend with the growth of the body—the increasing lungs should contribute to this, by being fully expanded in the act of respiration; thus enlarging the thoracic cavities, and assisting in giving to the breast that arched form which is commonly observed in strong persons, and upon which the beauty of form so intimately depends. But this we counteract by tight bandaging, and acquire a form very different from that which nature intended. The diminished capacity of the chest thus occasioned, gives rise to various diseases of the chest, and by increasing the specific gravity of the body renders the act of swimming much more

* See Vol. I. page 300.

difficult. Practice may, however, supply, in a great degree, what we have lost. "Nothing, in fact," says Campe, "can be easier than learning to swim. Little more is necessary, than the persuasion that you can swim if you will. This I was taught by the celebrated Franklin, when I was six and thirty years old. On this authority I made the trial, and succeeded. He says, all men can swim as well as all beasts: nothing more is requisite, than to have the courage to put yourself into a proper position, and make the same motions with your hands and feet you see the frogs do. But this courage you will not have, till you have found, by experience, that you can keep yourself afloat in this manner. To make the experiment, walk into the water where it deepens gradually, till you are up to your middle, and turn about your face to the shore. In this situation, you will not be afraid to throw yourself forwards, and imitate the motions of swimming; because you are certain, that you can soon reach the ground, and raise yourself up whenever you please. Thus you will soon find, that water has the power of supporting you. You repeat the trial, and every time your confidence increases: you gradually venture further and further from the shore, and thus the swimmer is formed."

ECONOMICAL SOUP.

It will be recollected, that in two of our former numbers, we noticed, briefly, some of the advantages which were likely to result to the poor and labouring classes, by the general introduction of soup, prepared from the jelly of bones. Recently, the original memoir of M. Darcet has been placed in our hands by a friend, in which are contained full details of the manner of preparing the soup, and descriptions and plans of the apparatus invented by the author for extracting the jelly from bones.* Believing that our readers will feel an equal interest with ourselves in this subject, we shall now lay before them such of the details, from the work before us, as we are able to condense within our present limits.

M. Darcet conceives it to be entirely unnecessary for him to insist upon the wholesome and nutritive properties of the gelatinous solution procured from bones, in the manner recommended by him, and its consequent fitness for ordinary food. This important point is now satisfactorily established, as well by the numerous experiments which have been made with this species of aliment, since its first introduction by M. Pepin, in 1681, as by the evidence of individuals in every respect competent, who,

* Recherches sur le substances Nutritives que renferment les os.

at different periods, have made it a subject of strict investigation. Were evidence, however, wanting, it is supplied in abundance by the facts detailed in the work before us, all of which prove, that independent of its cheapness, the jelly of bones is in the highest degree nutritive, and altogether favourable to the health of the consumer. There does not appear, indeed, to be any substance which can be so advantageously adopted as a substitute for butcher's meat, in the preparation of soup, or, in general, anamalise different kinds of vegetable food, and in that manner render them better adapted for the nourishment of the labouring classes. As an article of diet on ship board, it would appear, in many respects, to be superior to all others.

In the preparation of this soup, it is only the spongy extremities of the long bones, and the soft cellular portions of the flat bones, which are made use of—all the hard, compact bones, so useful in the arts, are rejected.

From long experience, and repeated analysis, M. Darcet has found, that 100 parts of bones, when dry, contain 60 parts of an earthy matter, 30 of jelly, and 10 of fat. One hundred killogrammes, or 221 pounds of bones, contain, therefore, 30 killogrammes, or upwards of 66 pounds of jelly; now, as 10 grammes, or 154½ grains of jelly, is sufficient to make one pint of soup, equal in quality to the best household broth, it is evident that the 100 killogrammes of bones will produce 3000 pints of soup; and one killogramme, (rather more than two pounds,) 30 pints. Now, one killogramme of butcher's meat will furnish only four pints of good soup; hence it follows, that, taking equal parts of both, the bones yield 7½ times more nutritive matter than the meat, as ordinarily used. Every quintal (221 pounds) of butcher's meat contains about 20 killogrammes, or 44.5 pounds of bones. This quantity of meat will furnish only 400 pints of soup, while the bones which it contains will themselves furnish about 600; consequently, from the bones alone contained, generally speaking, in any given quantity of butcher's meat, 3 pints of soup can be prepared, when the meat, together with the bones, in the ordinary processes of cookery, is sufficient only for 2 pints.

The bones, previously to being used, are well broken by rollers or a press; to attempt to reduce them into small pieces by pounders, would be very liable to give to the fat they contain an unpleasant empyreumatic flavour.

The apparatus for extracting the jelly, consists of a range of cylindrical vessels of iron, of equal dimensions, within each of which is contained another cylinder, removeable at pleasure, formed of tinned wire, woven like a sieve, and properly supported by bands; into the latter, the broken portions of bones are placed, when the whole is covered by a close cover, firmly secured. A current of steam is constantly kept up, by a pipe

coming from a proper generator. By this, the jelly is extracted from the bones, which, condensing within the cylinder, is drawn off by a cock placed at the lower part of the vessel.—To give all the details connected with the process and apparatus for preparing this jelly, is impossible, nor would our readers understand them without numerous plans and sections.

The gelatinous solution, as it flows from the apparatus, is perfectly clear and without taste; but contains as much animal matter as the best soup made in the ordinary manner, and may be rendered sufficiently sapid and palatable by the addition of either a small quantity of meal, or of various vegetable substances. It may also be reduced to a dry state, and in this manner kept for a considerable time without the least change;—all that is necessary at any time to convert it into soup, being to boil it in a proper quantity of water.

It has been found that the saline substances contained in meat, are the chief cause of the agreeable flavour which the latter communicates to the water in the preparation of soup. To communicate the same flavour to the soup made from the jelly of bones, from which of course every thing of a saline nature has been extracted, requires the addition of a seasoning, composed of 30 parts of muriate of potash, and 70 of common salt.

In this short notice of the aliment derived from bones, we have said nothing of the large amount of fat which is obtained at the same time, and of the various important uses to which it may be applied.—In concluding, we earnestly recommend to the attention of our soup and other charitable societies, that supply food to the poor during the winter, the plan of M. Darcet, by adopting which, they will be enabled from the bones now thrown away as useless, to procure a large amount of cheap, wholesome and nutritive food; and thus to extend still further, the good they are so eminently calculated to produce.

FRUITS AND PLANTS OF PALESTINE.

Our readers, we know, without distinction of sect, take a lively interest in all that relates to Palestine, the ancient Judea. We have therefore selected, for their perusal, a section on the Fruits and Plants of that country, from the 27th volume of Harper's Family Library, by the Rev. Michael Russell.

It has been remarked that, if the advantages of nature were duly seconded by the efforts of human skill, we might, in the space of twenty leagues, bring together in Syria the vegetable riches of the most distant countries. Besides wheat, rye, barley, beans, and the cotton-plant, which are cultivated everywhere,

there are several objects of utility or pleasure, peculiar to different localities. Palestine, for example, abounds in seasamum, which affords oil; and in dhoura, similar to that of Egypt. Maize thrives in the light soil of Balbec, and rice is cultivated with success along the marsh of Haoulé. Within these twenty-five years sugar-canes have been introduced into the gardens of Saida and Beirout, which are not inferior to those of the Delta. Indigo grows without culture on the banks of the Jordan, and only requires a little care to secure a good quality. The hills of Latakie produce tobacco, which creates a commercial intercourse with Damietta and Cairo. This crop is at present cultivated in all the mountains. The white mulberry forms the riches of the Druses, by the beautiful silks which are obtained from it; and the vine, raised on poles or creeping along the ground, furnishes red and white wines equal to those of Bordeaux. Jaffa boasts of her lemons and water-melons; Gaza possesses both the dates of Mecca and the pomegranates of Algiers. Tripoli has oranges which might vie with those of Malta; Beirout has figs like Marseilles, and bananas like St. Domingo. Aleppo is unequalled for pistachio-nuts; and Damascus possesses all the fruits of Europe; inasmuch as apples, plums, and peaches, grow with equal facility on her rocky soil. Niebuhr is of opinion that the Arabian coffee-shrub might be cultivated in Palestine.*

The *fig-tree*, the *palm*, and the *olive*, are characteristic of the Holy Land, and therefore deserve our more particular attention. In regard to the first, the earliest fruit produced, which is usually ripe in June, is called the boccore; the later, or proper fig, being rarely fit to be gathered before the month of August. The name of these last is the kermez, or kermouse. They constitute the article which passes through the hands of the merchant, after being either preserved in the common way or made up into cakes. They continue a long time on the tree before they fall off; whereas the boccore drop as soon as they are ripe, and according to the beautiful allusion of the prophet Nahum, 'fall into the mouth of the eater upon being shaken.'

The *palm* must at one time have been common in Palestine, though at present it fails to attract attention either on account of number or of beauty. In several coins of Vespasian, as well as of his son Titus, the land of Judea is typified by a disconsolate woman sitting under one of these trees. Jericho, which was formerly distinguished as the 'city of palms,' can still boast a few of them; because, besides the advantage of a sandy soil and a warm climate, it commands a plentiful supply of water, an element absolutely indispensable to their growth. At Jeru-

* Malte-Brun, vol. ii. p. 139.

salem, Shechem, and other places to the northward of the capital, not more than two or three of them are ever seen together; and even these, as their fruit rarely comes to maturity, are of no farther service than, like the palm-tree of Deborah, to shade the council of the sheiks, or to supply the branches, which, as in ancient days, may still be required for religious processions.*

The *olive* no longer holds the place which it once occupied in the estimation of the inhabitants of Palestine. The wretched government under which they exist has rooted out all the seeds of industry, by rendering the absence of wealth the only security against oppression. But in those places where it continues to be cultivated, it affords ample proof to establish the accuracy of the inspired writer, who denominated Palestine a land of oil-olive and honey.

The *cedars of Libanus* still maintain their ancient reputation for beauty and stature; while they are diversified by a thousand elegant plants, which dispute with them the possession of the lofty summits of the mountain. Here the astragalus tragacanthoides displays its clusters of purple flowers; and the primrose, the amaryllis, the white and the orange lily, mingle their brilliant hues with the verdure of the birch-leaved cherry. Even the snow of the highest peaks is skirted by shrubs possessing the most splendid colours. The coolness, humidity, and good quality of the soil support an uninterrupted vegetation; and the bounties of nature in those elevated regions are still protected by the spirit of liberty.

Hasselquist is of opinion that the *wild-grapes* mentioned by the prophet Isaiah, must be the hoary night-shade, or solanum incanum, because it is common in Egypt, Palestine, and Syria. The Arabs call it wolf-grape, as, from its shrubby stalk, it has some resemblance to a vine. But the sacred writer could not have found a weed more opposite to the vine than this, or more suitable to the purpose which he had in view; for it is extremely pernicious to that plant, and is rooted out whenever it appears. 'Wherefore,' exclaims the holy seer, 'when I looked that my vineyard should bring forth grapes, brought it forth poisonous night-shade?'†

The author just named, describes the 'balsam of Aaron' as a very fine oil, which emits no scent or smell, and is very proper for preparing odoriferous ointments. It is obtained from a tree called behen, which grows in Mount Sinai and Upper Egypt, and, it is presumed, in certain parts of the Holy Land. Travellers assert that it is the very perfume with which the ancient high-priest of the Jews, with whose name it is connected, was wont to anoint his beard, and which the Psalmist extols so much

* Shaw's Travels, vol. ii. p. 152. † Isaiah, v. 4.

on account of its rich odour and mollifying qualities,—the emblem of domestic harmony and brotherly love.

There still exists a thorn in Palestine, known among botanists by the name of the 'spina Christi,' or thorn of Christ, and supposed to be the shrub which afforded the crown worn by our Saviour before his crucifixion. It must have been very fit for the purpose, for it has many small sharp prickles, well adapted to give pain; and as the leaves greatly resemble those of ivy, it is not improbable that the enemies of the Messiah chose it from its similarity to the plant with which emperors and generals were accustomed to be crowned; and hence, that there might be calumny, insult, and derision, meditated in the very act of punishment.*

ADVICE TO WESTERN SETTLERS.

THE following good common sense directions, from a work† of high value recently published, are entitled to a place in our pages. The author, Mr. Timothy Flint, is already advantageously known to the reading public, on whose gratitude the present offering will make large and well founded additional claims:—

"The most affectionate counsel we could give an immigrant, after an acquaintance with all districts of the western country of sixteen years, and after having seen and felt no small share of all we have attempted to record, would be to regard the salubrity of the spot selected, as a consideration of more importance than its fertility, or vicinity to a market."—The advice to the new settler to supply himself with a good manual of domestic medicine, is impracticable—no such manual is to be found;—that to have a lancet, and learn how to open a vein, is good. The advice to have a small and well labelled and well supplied medicine chest, is not amiss, connected with what follows, viz. "To be, after all, very cautious about either taking or administering its contents, reserving them for emergencies, and for a choice of evils; to depend for health on temperance, moderation in all things, a careful conformity to food and dress, to circumstances and the climate; *and, above all, let him observe a rigid and undeviating abstinence from that loathsome and murderous western poison, whiskey, which may be pronounced the prevalent miasm of the country.* Let every immigrant learn the mystery, and

* Voyages and Travels in the Levant, p. 288.

† The History and Geography of the Mississippi Valley. To which is appended a condensed Physical Geography of the Atlantic United States, and the whole American Continent, second edition, by *Timothy Flint*, author of the "Recollections of the last ten years in the Mississippi Valley." Cincinnati, 1832. E. H. Flint and L. R. Lincoln. Two volumes in one, pp. 740.

provide the materials to make good beer. Let every immigrant, during the season of acclimation, especially the sultry months, take medicine by way of prevention, twice or thrice, with abstinence from labour a day or two afterwards."

We should say, let the immigrant, when he first experiences unpleasant bodily feelings in hot weather, such as head-ache, with loss of appetite, fast and rest from labour for a few days, and he will avoid sickness, and prevent the necessity of taking any physic at all. "Let him," continues the author, "have a Bible for a constant counseller, and a few good books, for instruction and amusement. Let him have the dignity and good sense to train his family religiously, and not to be blown about by every wind of doctrine, in religion, politics, or opinions. Let his rifle rest, and let the game, unless it come in his way, live on. Let him cultivate a garden of choice fruit, as well as a fine orchard. Let him keep bees, for their management unites pleasure and profit. Let him prepare for silk-making on a small and gradual scale. Let him cultivate grapes by way of experiment. Let him banish unreal wants and learn the master secret of self-possession, and be content with such things as he has, aware that every position in life has advantages and trials. Let him assure himself that if an independent farmer cannot be happy, no man can. Let him magnify his calling, respect himself, envy no one, and raise to the author of all good, constant aspirations of thankfulness, as he eats the bread of peace and privacy."

We shall be tempted to refer again to the instructive volume of Mr. Flint.

"*A Whisper to a newly married Pair, from a Widowed Wife.*—Philadelphia. E. L. Carey and A. Hart." P.p. 103.

We had prepared copious extracts from the excellent little work with the above title, but are prevented, on this occasion, from inserting them.

The Health Almanac, for 1833, is in press, and will shortly be published, by Key, Mielke, & Biddle.

PAYMENT.

☞All persons indebted for this Journal, are requested to make immediate payment to the subscriber, as assignee of H. H. Porter, the former publisher.

May 23, 1832. S. POTTER, No. 27, Minor street.